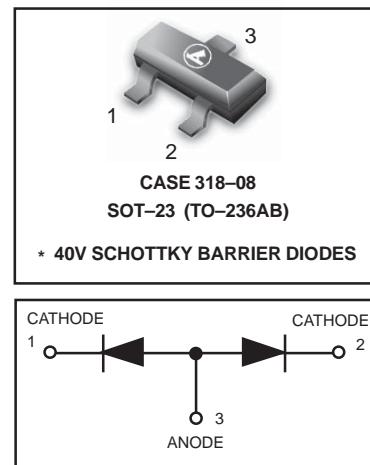


Common Anode Schottky Barrier Diode

BAS40-06LT1

These Schottky barrier diodes are designed for high speed switching applications, circuit protection, and voltage clamping. Extremely low forward voltage reduces conduction loss. Miniature surface mount package is excellent for hand held and portable applications where space is limited.

- Extremely Fast Switching Speed
- Low Forward Voltage — 0.50 Volts (Typ)
- @ $I_F = 10 \text{ mA}$
- Device Marking: L2



ORDERING INFORMATION

| Device | Package | Shipping |
|-------------|---------|------------------|
| BAS40-06HT1 | SOT-23 | 3000/Tape & Reel |

Preferred: devices are recommended choices for future use and best overall value.

MAXIMUM RATINGS ($T_J = 150^\circ\text{C}$ unless otherwise noted)

| Rating | Symbol | Value | Unit |
|---|----------------|-------------|----------------------------|
| Reverse Voltage | V_R | 40 | Volts |
| Forward Power Dissipation @ $T_A = 25^\circ\text{C}$ | P_F | 225 | mW |
| Derate above 25°C | | 1.8 | $\text{mW}/^\circ\text{C}$ |
| Operating Junction and Storage Temperature Range | T_J, T_{stg} | -55 to +150 | $^\circ\text{C}$ |

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

| Characteristic | Symbol | Min | Max | Unit |
|---|-------------|-----|-----|---------------|
| Reverse Breakdown Voltage ($I_R = 10 \mu\text{A}$) | $V_{(BR)R}$ | 40 | — | Volts |
| Total Capacitance ($V_R = 1.0 \text{ V}$, $f = 1.0 \text{ MHz}$) | C_T | — | 5.0 | pF |
| Reverse Leakage ($V_R = 25 \text{ V}$) | I_R | — | 1.0 | μA |
| Forward Voltage ($I_F = 0.1 \text{ mA}$) | V_F | — | 380 | mVdc |
| Forward Voltage ($I_F = 30 \text{ mA}$) | V_F | — | 500 | mVdc |
| Forward Voltage ($I_F = 100 \text{ mA}$) | V_F | — | 1.0 | Vdc |

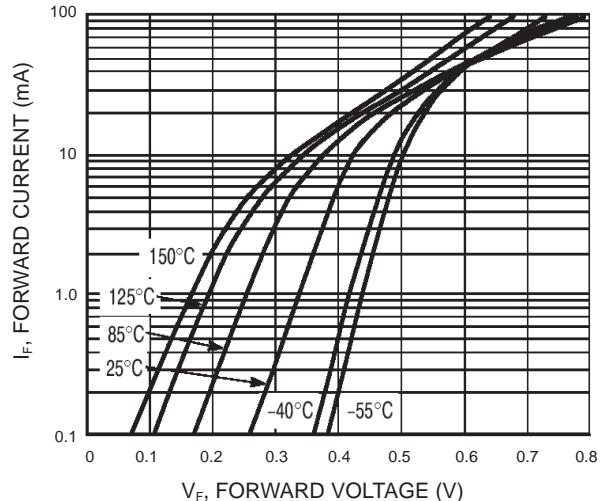
BAS40-06LT1


Figure 1. Typical Forward Current

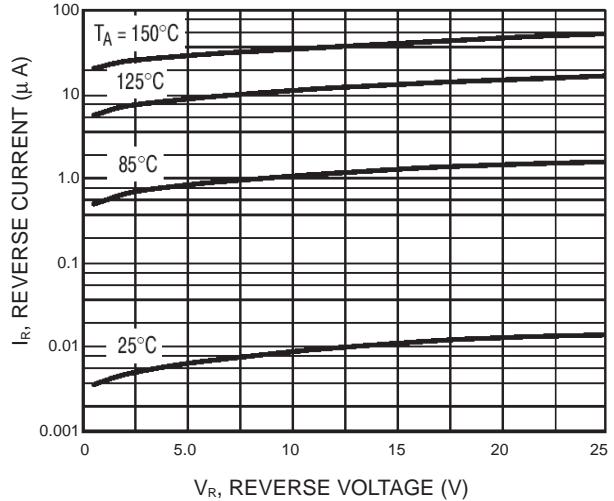


Figure 2. Reverse Current Versus Reverse Voltage

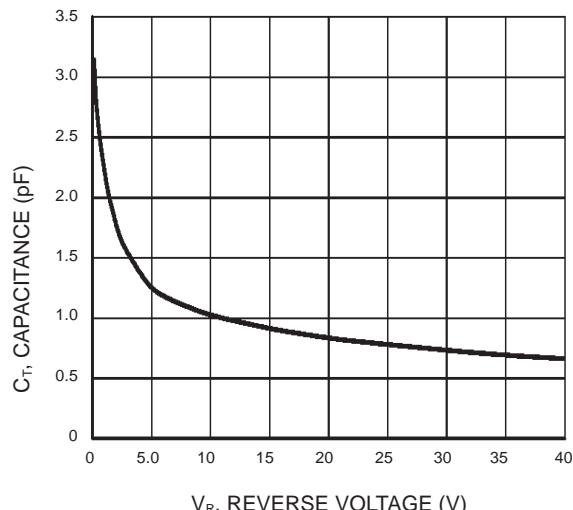


Figure 3. Typical Current